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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,933	10/13/2004	Yuan-Ting Wu	MTKP0103USA	5932

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EXAMINER	
HEYI, HENOK G	

ART UNIT	PAPER NUMBER
2627	

NOTIFICATION DATE	DELIVERY MODE
06/06/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/711,933	WU ET AL.	
	Examiner	Art Unit	
	HENOK G. HEYI	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 02/12/2008 have been fully considered but they are not persuasive. A person of ordinary skill in the art would definitely combine the teachings of Green and Nakai because one could only calculate the track capacity based on the writing mode being used. As it stands now, claim 1 is broadly claimed and it is obvious for one of ordinary skill in the art that track capacity depends on the kind of write mode chosen for writing. As to the applicant's argument that "method 1" and "method 2" of Green is different from steps "a" and "b" that was claimed in claim 26, examiner sees no difference because laying out the blocks of the track based on the write mode is not different from setting actual capacity of the target track. In both cases, as it is seen in Fig. 4A and 4B, the pre-gap is mapped out. For further explanation, applicant is advised to look at the equation for track capacity on the previously cited reference – Inokuchi et al. col 18 lines 5-50.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 26-33 and 36-38 are rejected under 35 U.S.C. 102 (e) as being anticipated by Green et al. US 7,117,230 B1 (Green hereinafter).

Re claim 26, Green teaches a method for identifying track capacity of a track of an optical disk in an optical disk drive (the media capacity calculation, which is a factor in the background initialization process, remaining space calculations, and the like, is one example of a media space calculation, col 17 line 13), the method comprising: (a) setting actual capacity of a target track as the size of the target track excluding its pre-gap when the write mode of the target track is a first type (Method 2 addressing is used in fixed packet mode with the periodicity of the link blocks enabling the device mapping to ignore link blocs to present the logical addressing of user data as a contiguous stream of blocks with no link blocks, col 15 line 42); and (b) setting actual capacity of the target track as the size of the target track excluding its pre-gap and at least a part of link blocks when the write mode of the target track is a second type (illustrating Method 1 addressing of a track on CD media. As is known, packet writing to an optical media consists of writing packets of data of either a fixed or variable size, the size being pre-determined, and link blocks, also of a pre-determined size, written between two packets of user data, col 14 line 51); wherein the target track comprises a plurality of link blocks when its write mode is the second type.

Re claim 28, Green teaches the method of claim 26, wherein the second type of write mode is track-at-once (TAO) (the session was opened and a track-at-once (TAO) alignment track was written, col 13 line 48), fixed packet write (FPKT), or variable

packet write (VPKT) (packet writing to an optical media consists of writing packets of data of either a fixed or variable size, col 14 line 53).

Re claim 29, Green teaches the method of claim 28, further comprising setting actual capacity of the target track (the media capacity calculation, which is a factor in the background initialization process, remaining space calculations, and the like, is one example of a media space calculation, col 17 line 13) as the size of the target track excluding its pre-gap (although a pre-gap 266 is not user data, it is a multi-track structure that is not mapped out of Method 2 addressing, col 16 line 24) and last two link blocks (Method 2 addressing is used in fixed packet mode with the periodicity of the link blocks enabling the device mapping to ignore link blocs to present the logical addressing of user data as a contiguous stream of blocks with no link blocks, col 15 line 42) when the write mode of the target track is TAO (the session was opened and a track-at-once (TAO) alignment track was written , col 13 line 48).

Re claim 30, Green teaches the method of claim 28, further comprising setting actual capacity of the target track (the media capacity calculation, which is a factor in the background initialization process, remaining space calculations, and the like, is one example of a media space calculation, col 17 line 13) as the size of the target track excluding its pre-gap (although a pre-gap 266 is not user data, it is a multi-track structure that is not mapped out of Method 2 addressing, col 16 line 24) and last two link blocks (Method 2 addressing is used in fixed packet mode with the periodicity of the link blocks enabling the device mapping to ignore link blocs to present the logical addressing of user data as a contiguous stream of blocks with no link blocks, col 15 line

42) when the write mode of the target track is VPKT (packet writing to an optical media consists of writing packets of data of either a fixed or variable size, col 14 line 53).

. Re claim 31, Green teaches the method of claim 28, further comprising setting actual capacity of the target track (the media capacity calculation, which is a factor in the background initialization process, remaining space calculations, and the like, is one example of a media space calculation, col 17 line 13) as the size of the target track excluding its pre-gap (although a pre-gap 266 is not user data, it is a multi-track structure that is not mapped out of Method 2 addressing, col 16 line 24) and all link blocks (Method 2 addressing is used in fixed packet mode with the periodicity of the link blocks enabling the device mapping to ignore link blocs to present the logical addressing of user data as a contiguous stream of blocks with no link blocks, col 15 line 42) when the write mode of the target track is FPKT (packet writing to an optical media consists of writing packets of data of either a fixed or variable size, col 14 line 53).

Re claim 32, Green teaches the method of claim 26, wherein the optical disk drive is a read-only optical disk drive or a recordable optical disk drive (Examples of the computer readable medium include read-only memory, random-access memory, CD-ROMs, CD-Rs, CD-RWs, DVD-ROM, DVD-R/RW, DVD-RAM, DVD+R/+RW, magnetic tapes, and other optical data storage devices, col 22 line 63).

Re claim 33, Green teaches an optical disk drive for utilizing the method of claim 26 to identify track capacity of a track of an optical disk (the media capacity calculation, which is a factor in the background initialization process, remaining space calculations, and the like, is one example of a media space calculation, col 17 line 13).

Re claims 36 – 38, all new claims are dependent on previously rejected claims 1, 16 and 26. As such, all of them are rejected for the same reasons. Green also teaches the added new limitation in claims 36-38 of determining the write mode of each track during initialization process (a rapid format technique allowing a user to write to media in just a few minutes after initiation of the rapid formatting. The hardware solution generally utilizes the UDF format, and proceeds to incrementally initialize whole sections of media while allowing a user to write to those sections that have been initialized, col 2 lines 58-64).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-25, 27, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al US 7,117,230 B1 (Green hereinafter) in view of Nakai US 6,928,567 B2 (Nakai hereinafter).

Re claims 1-25 and 27, the rejections applied to claims 1-25 and 27 in the previous Office action mailed December 3, 2007 are herein repeated for the same reasons (see Response to Arguments).

Re claims 34 and 35, all new claims are dependent on previously rejected claim 1, and as such, all of them are rejected for the same reasons as claims 1, 16 and 26.

Green also teaches the added new limitation in claims 34 and 35 of determining the write mode of each track during initialization process (a rapid format technique allowing a user to write to media in just a few minutes after initiation of the rapid formatting. The hardware solution generally utilizes the UDF format, and proceeds to incrementally initialize whole sections of media while allowing a user to write to those sections that have been initialized, col 2 lines 58-64).

Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Tabe et al reference teaches about two recording methods and about their storage capacity while the Inokuchi et al. reference teaches about the various writing modes and how to calculate track capacity.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENOK G. HEYI whose telephone number is (571)270-1816. The examiner can normally be reached on Monday to Friday 8:30 to 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Henok G Heyi/
Examiner, Art Unit 2627

/William Korzuch/
SPE, Art Unit 2627